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09/739,034	12/14/2000	Werner Obrecht	MO5842/LEA 34092	4130
34947 7590 06/07/2012 LANXESS CORPORATION 111 RIDC PARK WEST DRIVE PITTSBURGH, PA 15275-1112				
EXAMINER				
SERGENT, RABON A				
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/739,034  
Filing Date: 12/14/2000  
Appellant(s): Obrecht et al.

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Nicanor A. Kohncke  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed May 14, 2012.

**(1) Grounds of Rejection to be Reviewed on Appeal**

Every ground of rejection set forth in the Office action dated September 15, 2011 from which the appeal is taken is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

The following ground(s) of rejection are applicable to the appealed claims.

**Rejection 1: Obviousness Rejection Over Obrecht et al. or DE 19701487,**

**Each in View of JP 57-212239 or JP 5-17630**

Claims 9 and 23-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obrecht et al. ('488) or DE 19701487, each in view of JP 57-212239 or JP 5-17630.

The primary references disclose rubber mixtures comprising double bond containing rubber and crosslinked rubber particles having appellants' claimed properties, wherein the mixtures are useful for producing vulcanisates and molded articles, such as those claimed. See abstract; column 1, lines 31+; columns 2 and 3; and column 4, lines 49-59 within Obrecht et al. See abstract and page 4, line 3 (German language document) (page 12, lines 16 and 17 of English language translation) within DE 19701487. Though the primary references are silent regarding the addition of a polyisocyanate component to the composition, the use of polyisocyanates within rubber mixtures to improve physical properties was known at the time of invention. This position is supported by the teachings of the secondary references. The secondary references disclose that polyisocyanate containing rubber formulations display excellent moldability and promote bonding of the rubber particles. See abstracts of secondary references. Furthermore, within paragraph [0008] of the translation of JP 5-17630 and page 10,

lines 1-6 of the translation of JP 57-212239, the secondary references specifically refer to the reaction of the polyisocyanate and rubber, wherein JP 57-212239 specifically refers to a resulting increase in both modulus of elasticity and elongation. It is noted that paragraphs [0001], [0010], and [0011] of the translation of JP 5-17630 teach that the composition therein may be used in the production of rubber block molded bodies. Also, at page 2, line 2 and page 3, lines 3 and 4 of the translation of JP 57-212239, it is disclosed that the compositions may be used to produce bead filler for tires. Therefore, both of the relied upon secondary references clearly allow for the use of the disclosed compositions in the production of moldings.

Therefore, it would have been obvious to incorporate polyisocyanates within the rubber mixtures of the primary references, so as to produce rubber compositions having the improved moldability, properties, and bonding characteristics taught by the secondary references. This position is bolstered by the fact that it has been held that it is *prima facie* obvious to utilize a known component for its art recognized purpose. *In re Linder*, 173 USPQ 356. *In re Dial et al.*, 140 USPQ 244.

## **(2) Response to Argument**

### **Response to Arguments With Respect to Rejection I**

Appellants' response has been considered; however, it is insufficient to overcome the prior art rejection. Appellants have argued within page 11 of the Appeal Brief that the combination of Obrecht et al. or DE 19701487, each in view of JP 57-212239 or JP 5-17630, would necessarily produce an adhesive composition containing a tackifying resin, which would be expected to render the same unsuitable as the claimed molded body. Specifically, with respect to secondary reference, JP 5-17630, appellants argue that the reference is directed to

adhesive compositions which would be expected to render the combination with the primary references unsuitable for the production of the claimed molded rubber bodies. With respect to secondary reference, JP 57-212239, appellants argue that the reference does not provide any teaching that the polyisocyanate component is responsible for the disclosed high dynamic modulus due to the presence of other components in the rubber composition. Appellants specifically argue that in addition to the polyisocyanate, the composition includes a phenolic resin. Appellants argue that the skilled artisan would “not” have attributed the higher dynamic modulus to the phenolic resin and, therefore, would have found the claimed molded rubber bodies to be unexpected in view of the combination of the polyisocyanate with the compositions of the primary references.

In response, firstly, the examiner fails to clearly understand appellants' reference to a tackifying agent, because it is not seen that any of the currently relied upon references specify a tackifying agent. While a previously relied upon reference, which has previously been withdrawn during prosecution, specified a tackifying agent, it is not seen that this issue is relevant to the issue now at hand. Secondly, appellants' argument regarding the combination of the primary references with JP 5-17630 is not well taken in view of the fact that it is specifically disclosed within paragraphs [0001], [0010] and [0011] of the translation of JP 5-17630 that the compositions therein may be used to produce rubber block molded bodies. In view of this disclosure, the skilled artisan would not conclude that any issue regarding adhesion, as far as it may pertain to the reference, is detrimental to the production of rubber block molded bodies. Therefore, there is no justification for appellants' argument that the combination with the primary references would be expected render the production of molded rubber bodies unsuitable.

Thirdly, appellants' argument with respect to the combination of the primary references with JP 57-212239 is not well taken for the following reasons. The argued phenolic resins of the secondary reference are not excluded from the instant claims. Accordingly, applicants' arguments concerning such non-excluded components are neither relevant to the issues at hand nor commensurate in scope with the instant claims. At this point, the examiner notes that appellants' language, "the skilled artisan would "not" have attributed the higher dynamic modulus to the phenolic resin", is not understood, unless appellants' did not intend to use the word, "not". Regardless, the reference provides the requisite motivation to use the polyisocyanate component within the compositions of the primary references. Despite appellants' argument, the passage at page 10, lines 1-6 of the translation of JP 57-212239 specifically refers to the reaction of the polyisocyanate and rubber, wherein an increase in both modulus of elasticity and elongation is seen. Therefore, there is a disclosed nexus between the polyisocyanate component and the disclosed improved properties, and this disclosed nexus provides further motivation to include the polyisocyanate into the compositions of the primary references. Contrary to appellants' assertions regarding unexpected results, given the relied upon teachings of the references, it is not seen that anything unexpected adequate to rebut the *prima facie* case of obviousness has been presented.

Appellants' arguments having been addressed, the examiner presents the following remarks in further support of his position. In response to appellants' fundamental argument that the rejection fails because one would have expected adhesive compositions to result from the inclusion of the polyisocyanate of the secondary references, the examiner further takes the position that in order for something to be adhesive, it must necessarily possess a degree of

stickiness or tackiness or be able to adhere to something when it makes contact, and the position is taken that the argued prior art compositions possess this property prior to cure or vulcanization; however, once cured, thereby forming vulcanates, it is reasonable to conclude that while the property of **adhesion** (the bonding between materials) remains, the **cured** compositions are no longer **adhesive**, in that they lack the ability to further adhere to materials they contact once cured. It is important to note that the prior art largely discusses the compositions in the context of being uncured, since this is when they are usable or able to be applied and possess adhesive properties; however, in view of the fact that the claims require vulcanates or cured materials, it is proper to view the prior art materials in terms of them existing in their cured state. Despite appellants' arguments, taken in this context, it is entirely reasonable to expect that the prior art compositions, once cured would no longer be adhesive. The examiner takes the position that appellants' compositions prior to curing and the prior art uncured compositions modified in accordance with the position of the examiner would possess degrees of adhesiveness in much the same way that uncured epoxy glue possesses adhesiveness; however, once cured, the position is taken that it is reasonable to conclude that the modified prior art composition would be non-adhesive in much the same way that the cured epoxy would be non-adhesive. Accordingly, it is not seen that it is improper or unreasonable to rely on the teachings of the secondary references in the manner proposed by the examiner.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Rabon Sargent/  
Primary Examiner, Art Unit 1765

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